



To: Karen Mason-Smith/R5/USEPA/US@EPA, epa4413@epa.state.il.us, Dgraham@Ci.Chi.II.Us

cc: Doug.A.Meadors@lrl02.usace.army.mil, jevranicar@fieldgolan.com, robert.w.suda@mwhglobal.com, Fred.Grant@lrl02.usace.army.mil

Subject: Draft Construction Completion Report RTC

Read ahead copy of response to USEPA Region V comments on the Draft Construction Completion Report for Fort Dearborn USARC, Chicago, Illinois.



RTC 061703 USEPA CCR Cmts_Jul03.d

Response to USEPA Comments Dated June 17, 2003 Draft Construction Completion Report for Various Site Remediations Fort Dearborn USARC, Chicago, Illinois Page 1 of 4

1. Section 1.1 Background, 3rd paragraph, p.2: Why was the fifth Category 7 site (Indoor Firing Range) not included in this Construction Completion Report (CCR)? The Indoor Firing Range (Site ORD-1) was included in the December 2001 Final Work Plan For Various Site Remediations at Fort Dearborn. Please add a section to the CCR to include any deviations from the work plan and unplanned occurrences.

Response: As stated in Section 2.0 of the Final Work Plan, "This Work Plan addresses the collection of soil samples and/or the removal of equipment associated with four of the five identified Category 7 locations. The fifth area, the firing range, was removed and remediated by Cape Environmental in November 1999. The remaining four sites addressed in this Work Plan include the former vehicle inspection pit (OTH-1), the former shop sink (OTH-2), the former vehicle wash rack (OTH-3), and the oil-water separator (OWS-1). This Work Plan also addresses removal of a 250-gallon aboveground storage tank (AST) located north of the Organizational Maintenance Shop (OMS) Building." Accordingly, the last sentence in Section 1.1 of the Construction Completion Report states "A fifth Category 7 Area, the Indoor Firing Range, was remediated by Cape Environmental, Inc. in November 1999 and is not addressed herein." To provide clarity, the text has been revised to add the statement "Results of the remediation are presented in Final Closure Report, Industrial Hygiene Surveillance and Air Monitoring Conducted During Range Decommissioning at Fort Dearborn Army Reserve Center, Small Arms Firing Range, Rosemont, Illinois, dated May 2000." at the end of Section 1.1

2. Section 1.3 Project Scope and Objectives, 3rd paragraph, p.4: The CCR states that the "scope of work also included removal of an empty unattached 250-gallon above-ground storage tank (AST) that was resting on the ground near the north side of the OMS Building. No further information regarding the disposition of the tank is available."

Did the Army's contractor perform any sampling near the north side of the OMS Building, or suspect any potential contamination in this area?

Response: The above ground storage tank was apparently abandoned on the property. Since the tank was empty and there was no evidence of any spills or leaks associated with the tank, no environmental concerns were noted and no environmental sampling was included in the approved work plan. However, to properly dispose of the tank, the scope of the demolition project included provisions for disposal of the tank. To provide clarity, the text has been revised to include the following statement: "No evidence of spills or leaks were observed to be associated with the tank. Therefore, no environmental sampling was required as part of this project."

Response to USEPA Comments Dated June 17, 2003 Draft Construction Completion Report for Various Site Remediations Fort Dearborn USARC, Chicago, Illinois Page 2 of 4

3. Section 3.1.5 Analytical Data Validation, p.15: Text states that the independent third-party validation (to be done by USACE contractor Lee A. Knupple and Assoc.), on at least 10% of the data, was submitted separately from this document. US-EPA has not received this data validation report as yet. Please be advised that our review of this Construction Completion Report will not be complete without our ability to review the third-party data validation report, and findings.

Response: The third-party data validation report is pending and will be provided in a separate submission as soon as it is available.

4. Tables Section/all SVOCs: It was noted that for all the SVOC data tables, significant hits were listed for 2,4,6 Tribromophenol (listed as a surrogate in the SVOC analytical reports provided in Appendix D), but no listing or values for 2,4,6 Trichlorophenol (which was an actual analyte listed in the Appendix D SVOC reports). Is this a typo, or is the surrogate being reported out here?

Response: The table has been corrected to replace 2,4,6 Tribromophenol with 2,4,6-Trichlorophenol. Other changes made to this table to address errata identified while reviewing this comment are: correct the result for benzo(g,h,i)perylene in sample FIP-003-06-SSS; and correct the reporting limits for 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, and hexachlorobutadiene.

5. Appendix D, Case Narratives, Manual Integration: It was noted for every case narrative, under PCB Fraction - Method 8082, there were listing of pages where manual integration took place, and the only explanation provided was a statement to "See hard copy for explanations of manual integrations". There were no hard copy provided, nor any explanations of why any of this manual integration took place in this report. Please provide an explanation of what manual integrations took place, why they were necessary, and if it was deemed justified.

Response: The project QAPP specifies that ARDL will follow the procedures outlined USEPA Region V Policy on Manual Integration (USEPA, 2001). The Region V Manual Integration Policy states that it is "limited only to GC/MS methodologies, specifically for Volatiles and Semi-Volatiles analysis." Polychorinated biphenyls are analyzed by Method SW8082, which is a GC method, therefore, manual integration documentation is not required under the Region V Manual Integration Policy. PCB manual integration documentation can be provided upon request.

Benzo(b)fluoranthene (sample VWR-005-02-EBT) and benzo(k)fluoranthene (samples VWR-006-02-EBT, VWR-003-02-ESW, FSS-007-05-EBT, FSS-004-040ESW, and FSS-003-04-ESW) analyzed by GC/MS using Method SW8270C SIM were manually

Response to USEPA Comments Dated June 17, 2003 Draft Construction Completion Report for Various Site Remediations Fort Dearborn USARC, Chicago, Illinois Page 3 of 4

integrated. These compounds were manually integrated due to an incorrect peak selected by the computer. Manual integration documentation for these samples is provided in the revised Appendix D.

6. Appendix D, Lab Report 301101: The sample VWR-008-02-EBT appears on the chain of custody forms, and has analytical data output forms for VOCs, SVOCs, PCBs, PAHs, Glycol, and Inorganics. However, there is no listing of this data in the Tables section of this report, nor a mention in either the text of the report, or indication on the sampling Figure 4 (Former Vehicle Wash Rack) area, as to where this sample was taken or what impact (if any) this data had. Please explain.

Response: Sample VWR-008-02-EBT is a field duplicate of sample VWR-006-02-EBT. Section 2.15 has been added to the Data Validation Report to discuss quality control (QC) sample results. The results have no impact on the findings presented in the Construction Completion Report.

7. Appendix D, Lab Report 301104: The sample OWS-005-08-EBT appears to have been run three times for VOCs (there are three separate VOC data sheets, numbered ARDL lab no.301104-01, 301104-01MS, and 301104-MD). The Tables section of the report, shows only the data for one of the samples, not the MS/MD pair. Are the hits for 1,1-dichloroethene, benzene, trichloroethene, toluene, and chlorobenzene shown in the MS and MD samples due only to the matrix spike?

Response: An MS/MSD was conducted on sample OWS-005-08-EBT, which was non-detect for all target VOC analytes. The MS/MSD spike included 1,1-dichloroethene, benzene, trichloroethene, toluene, and chlorobenzene. The detections of these compounds in the MS and MSD samples were due to the spike. To avoid confusion potentially arising from this, the MS and MSD results have been removed from the revised Appendix D.

8. Appendix E, Data Validation Report: In Section 2.13 Manual Integration, text states that the laboratory case narratives did not provide any documentation of manual integration for GC or GC/MS analysis. The raw data for only two SDGs were reviewed for evidence of manual integration. There is little or no indication from this Validation Report of why the manual integrations were done, if the manual integrations were done properly, or if they were even necessary. Furthermore, this level of review does not satisfy the requirements of the Region V Manual Integration Policy, as the text infers in the Summary Section 3.0 of this Data Validation Report. The validation did not even satisfy the requirements of the Final Project QAPP (see Final Project QAPP, , June 2002, Section 6.2.5 Manual Integration, p.32 -34). All manually integrated data (100%) must be validated by an independent third party validator. US-EPA has not yet seen the third party validation report, nor any indication that 100% of the manually integrated data has,

Response to USEPA Comments Dated June 17, 2003 Draft Construction Completion Report for Various Site Remediations Fort Dearborn USARC, Chicago, Illinois Page 4 of 4

or ever will be, validated.

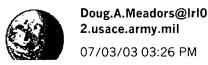
Response: The text in Section 2.13 was incorrect. The case narratives included in Appendix D list all instances of manual integration. All GC/MS manual integration documentation is provided in the revised Appendix D. For clarity and correctness, Section 2.13 has been revised to state:

"Manual integration of analytical data produced by GC or GC/MS is defined as replacing the automatically generated output of the data handling system of an analytical instrument with an analyst-generated estimation of the area under the peak.

The laboratory case narratives listed all instances of manual integration. All GC/MS manual integrations were clearly identified on the raw data quantitation reports with an "M" flag and the before and after chromatograms that were signed and dated by the analyst were provided.

Polychlorinated biphenyls analyzed by SW8082, a GC method, required had manual integrations due to excess area under the peaks. Benzo(b)fluoranthene (sample VWR-005-02-EBT) and benzo(k)fluoranthene (samples VWR-006-02-EBT, VWR-003-02-ESW, FSS-007-05-EBT, FSS-004-04-ESW, and FSS-003-04-ESW) analyzed by GC/MS using SW8270C SIM were manually integrated due to incorrect peaks integrated by the computer. Manual integration documentation for benzo(b)fluoroanthene and benzo(k)fluoroanthene is provided in Attachment 1."

The third-party data validation report is pending and will be provided in a separate submission as soon as it is available.



To: Karen Mason-Smith, epa4413, Dgraham cc: Doug.A.Meadors, jevranic Subject: Draft Construction Completion Report RTC

Read ahead copy of response to USEPA Region V comments on the Draft Construction Completion Report for Fort Dearborn USARC, Chicago, Illinois.

RTC 061703 USEPA CCR Cmts_Jul03.d

RTC 061703 USEPA CCR Cmts_Jul03.d Meeting Notes (July 9, 2003) USEPA & IEPA will need to go back and check to see if the BCT/BRAC site will need to have any public involvement (i.e., notice in newspaper for Rad, FOST, Draft Final Tech Memo/Completion pproach for finalization of Friday (07/11/03) Haren & Andy Will an e-mail and for phone call. Aug. 2008 August 4, 2003)

Response to USEPA Comments Dated June 17, 2003 Draft Construction Completion Report for Various Site Remediations Fort Dearborn USARC, Chicago, Illinois Page 1 of 4

Notes 07/09/03 Km-S

1. Section 1.1 Background, 3rd paragraph, p.2: Why was the fifth Category 7 site (Indoor Firing Range) not included in this Construction Completion Report (CCR)? The Indoor Firing Range (Site ORD-1) was included in the December 2001 Final Work Plan For Various Site Remediations at Fort Dearborn. Please add a section to the CCR to include any deviations from the work plan and unplanned occurrences.

To specific textof each section where applicable. Response: As stated in Section 2.0 of the Final Work Plan, "This Work Plan addresses the collection of soil samples and/or the removal of equipment associated with four of the five identified Category 7 locations. The fifth area, the firing range, was removed and remediated by Cape Environmental in November 1999. remaining four sites addressed in this Work Plan include the former vehicle inspection pit (OTH-1), the former shop sink (OTH-2), the former vehicle wash rack (OTH-3), and the oil-water separator (OWS-1). This Work Plan also addresses removal of a 250-gallon aboveground storage tank (AST) located north of the Organizational Maintenance Shop (OMS) Building." Accordingly, the last sentence in Section 1.1 of the Construction Completion Report states "A fifth Category 7 Area, the Indoor Firing Range, was remediated by Cape Environmental, Inc. in November 1999 and is not addressed herein." To provide clarity, the text has been revised to add the statement "Results of the remediation are presented in Final Closure Report, Industrial Hygiene Surveillance and Air Monitoring Conducted During Range Decommissioning at Fort Dearborn Army Reserve Center, Small Arms Firing Range, Rosemont, Illinois, dated May 2000." at the end of Section 1.1

2. Section 1.3 Project Scope and Objectives, 3rd paragraph, p.4: The CCR states that the "scope of work also included removal of an empty unattached 250-gallon above-ground storage tank (AST) that was resting on the ground near the north side of the OMS Building. No further information regarding the disposition of the tank is available."

Did the Army's contractor perform any sampling near the north side of the OMS Building, or suspect any potential contamination in this area?

Response: The above ground storage tank was apparently abandoned on the property. Since the tank was empty and there was no evidence of any spills or leaks associated with the tank, no environmental concerns were noted and no environmental sampling was included in the approved work plan. However, to properly dispose of the tank, the scope of the demolition project included provisions for disposal of the tank. To provide clarity, the text has been revised to include the following statement: "No evidence of spills or leaks were observed to be associated with the tank. Therefore, no environmental sampling was required as part of this project."

3. Section 3.1.5 Analytical Data Validation, p.15: Text states that the independent third-party

('mment

Response to USEPA Comments Dated June 17, 2003 Draft Construction Completion Report for Various Site Remediations Fort Dearborn USARC, Chicago, Illinois Page 1 of 4

validation (to be done by USACE contractor Lee A. Knupple and Assoc.), on at least 10% of the data, was submitted separately from this document. US-EPA has not received this data validation report as yet. Please be advised that our review of this Construction Completion Report will not be complete without our ability to review the third-party data validation report, and findings.

Response: The third-party data validation report is pending and will be provided in a separate submission as soon as it is available.

4. Tables Section/all SVOCs: It was noted that for all the SVOC data tables, significant hits were listed for 2,4,6 Tribromophenol (listed as a surrogate in the SVOC analytical reports provided in Appendix D), but no listing or values for 2,4,6 Trichlorophenol (which was an actual analyte listed in the Appendix D SVOC reports). Is this a typo, or is the surrogate being reported out here?

Response: The table has been corrected to replace 2,4,6 Tribromophenol with 2,4,6-Trichlorophenol. Other changes made to this table to address errata identified while reviewing this comment are: correct the result for benzo(g,h,i)perylene in sample FIP-003-06-SSS; and correct the reporting limits for 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, and hexachlorobutadiene.

5. Appendix D, Case Narratives, Manual Integration: It was noted for every case narrative, under PCB Fraction - Method 8082, there were listing of pages where manual integration took place, and the only explanation provided was a statement to "See hard copy for explanations of manual integrations". There were no hard copy provided, nor any explanations of why any of this manual integration took place in this report. Please provide an explanation of what manual integrations took place, why they were necessary, and if it was deemed justified.

Response: The project QAPP specifies that ARDL will follow the procedures outlined USEPA Region V Policy on Manual Integration (USEPA, 2001). The Region V Manual Integration Policy states that it is "limited only to GC/MS methodologies, specifically for Volatiles and Semi-Volatiles analysis." Polychorinated biphenyls are analyzed by Method SW8082, which is a GC method, therefore, manual integration documentation is not required under the Region V Manual Integration Policy. PCB manual integration documentation can be provided upon request.

Benzo(b)fluoranthene (sample VWR-005-02-EBT) and benzo(k)fluoranthene (samples VWR-006-02-EBT, VWR-003-02-ESW, FSS-007-05-EBT, FSS-004-040ESW, and FSS-003-04-ESW) analyzed by GC/MS using Method

Response to USEPA Comments Dated June 17, 2003 Draft Construction Completion Report for Various Site Remediations Fort Dearborn USARC, Chicago, Illinois Page 2 of 4

SW8270C SIM were manually integrated. These compounds were manually integrated due to an incorrect peak selected by the computer. Manual integration documentation for these samples is provided in the revised Appendix D.

6. Appendix D, Lab Report 301101: The sample VWR-008-02- EBT appears on the chain of custody forms, and has analytical data output forms for VOCs, SVOCs, PCBs, PAHs, Glycol, and Inorganics. However, there is no listing of this data in the Tables section of this report, nor a mention in either the text of the report, or indication on the sampling Figure 4 (Former Vehicle Wash Rack) area, as to where this sample was taken or what impact (if any) this data had. Please explain.

Response: Sample VWR-008-02-EBT is a field duplicate of sample VWR-006-02-EBT. Section 2.15 has been added to the Data Validation Report to discuss quality control (QC) sample results. The results have no impact on the findings presented in the Construction Completion Report.

7. Appendix D, Lab Report 301104: The sample OWS-005-08-EBTappears to have been run three times for VOCs (there are three separate VOC data sheets, numbered ARDL lab no.301104-01, 301104-01MS, and 301104-MD). The Tables section of the report, shows only the data for one of the samples, not the MS/MD pair. Are the hits for 1,1-dichloroethene, benzene, trichloroethene, toluene, and chlorobenzene shown in the MS and MD samples due only to the matrix spike?

Response: An MS/MSD was conducted on sample OWS-005-08-EBT, which was non-detect for all target VOC analytes. The MS/MSD spike included 1,1-dichloroethene, benzene, trichloroethene, toluene, and chlorobenzene. The detections of these compounds in the MS and MSD samples were due to the spike. To avoid confusion potentially arising from this, the MS and MSD results have been removed from the revised Appendix D.

8. Appendix E, Data Validation Report: In Section 2.13 Manual Integration, text states that the laboratory case narratives did not provide any documentation of manual integration for GC or GC/MS analysis. The raw data for only two SDGs were reviewed for evidence of manual integration. There is little or no indication from this Validation Report of why the manual integrations were done, if the manual integrations were done properly, or if they were even necessary. Furthermore, this level of review does not satisfy the requirements of the Region V Manual Integration Policy, as the text infers in the Summary Section 3.0 of this Data Validation Report. The validation did not even satisfy the requirements of the Final Project QAPP (see Final Project QAPP, , June 2002, Section 6.2.5 Manual Integration, p.32 -34). All manually integrated data (100%) must be validated by an independent third party validator. US-EPA has not yet seen the third

Response to USEPA Comments Dated June 17, 2003 Draft Construction Completion Report for Various Site Remediations Fort Dearborn USARC, Chicago, Illinois Page 3 of 4

party validation report, nor any indication that 100% of the manually integrated data has, or ever will be, validated.

Response: The text in Section 2.13 was incorrect. The case narratives included in Appendix D list all instances of manual integration. All GC/MS manual integration documentation is provided in the revised Appendix D. For clarity and correctness, Section 2.13 has been revised to state:

"Manual integration of analytical data produced by GC or GC/MS is defined as replacing the automatically generated output of the data handling system of an analytical instrument with an analyst-generated estimation of the area under the peak.

The laboratory case narratives listed all instances of manual integration. All GC/MS manual integrations were clearly identified on the raw data quantitation reports with an "M" flag and the before and after chromatograms that were signed and dated by the analyst were provided.

Polychlorinated biphenyls analyzed by SW8082, a GC method, required had manual integrations due to excess area under the peaks. Benzo(b)fluoranthene (sample VWR-005-02-EBT) and benzo(k)fluoranthene (samples VWR-006-02-EBT, VWR-003-02-ESW, FSS-007-05-EBT, FSS-004-04-ESW, and FSS-003-04-ESW) analyzed by GC/MS using SW8270C SIM were manually integrated due to incorrect peaks integrated by the computer. Manual integration documentation for benzo(b)fluoroanthene and benzo(k)fluoroanthene is provided in Attachment 1."

The third-party data validation report is pending and will be provided in a separate submission as soon as it is available.